IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Carl Dvorak
Serial No.:	10/052,659
Filed:	January 18, 2002
Title:	Healthcare Information System With Clinical Information Exchange
Art Unit:	3626
Examiner:	Glass, Russell S.
Our Ref.:	310265.90236

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellant, having filed a timely Notice of Appeal of a Final Office Action in the above-identified patent application, hereby submits this Appeal Brief in support of patentability.

I. REAL PARTY IN INTEREST

The present application is assigned to Epic Systems Corporation as evidenced by the assignment recorded by the United States Patent and Trademark Office on May 17, 2002 at Reel/Frame 012912/0063.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III. STATUS OF CLAIMS

Claims 9 through 13 have been cancelled. Claims 1-8 and 14-20 are pending in the present application and have been finally rejected under 35 U.S.C. §103(a). The rejections of each of claims 1-8 and 14-20 are being appealed.

IV. STATUS OF AMENDMENTS

Amendments prior to the final office action have been entered. No amendments were attempted after the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 and claims that depend there from are drawn to a system for distributed computing that includes a clinical exchange server (paragraph 14, line 14) that is programmed to do three things. First, the exchange server is programmed to maintain a patient identification cross reference table that includes a list of applications and patient identification numbers used by each application where the patient identification numbers are application distinct (paragraph 21, lines 9-13). Second, the exchange server is programmed to maintain a list of events reported to it by the applications (paragraph 14, lines 16-18 and lines 24-29; paragraph 22, lines 6-10)). Third, the server is programmed to respond to queries from a first application about an event recorded by a second application by transmitting a query to the second application based on the information in the reference table and the list of reported events (paragraph 26, lines 10-15).

Claim 5 is drawn to a computer network comprising a clinical exchange server programmed to store in a storage device a reference table (see Fig. 2) including a master patient identifier (see patient ID number at the top left in Fig. 2 and paragraph 21, lines 1-6) for each patient , a list of application programs (paragraph 21, lines 11-12), and any separate identifying code (paragraph 21, lines 12-13) used for the patient by any of the application programs wherein the identifying codes are application specific patient identifying codes for the patient so that the identifying code used by an application for a patient can be found by accessing the reference table. Here, the clinical exchange server is also programmed to facilitate information exchange between the applications by using the reference table to extract information from one application that is requested by another application (paragraph 26, lines 5-17).

Claim 14 is drawn to a method for distributed computing including providing a clinical exchange server (paragraph 14, line 14) that does three things. First, the exchange server maintains a patient identification cross reference table that includes a list of applications and patient identification numbers used by each application where the patient identification numbers are application distinct (paragraph 21, lines 9-13). Second, the exchange server maintains a list of events reported to it by the applications (paragraph 14, lines 16-18 and lines 24-29; paragraph 22, lines 6-10)). Third, the server responds to queries from a first application about an event recorded by a second application by transmitting a query to the second application based on the information in the reference table and the list of reported events (paragraph 26, lines 10-15).

Claim 18 is drawn to a method including providing a clinical exchange server (paragraph 14, lines 12-14) programmed to store in a storage device a reference table (see Fig. 2) including a master patient identifier (see patient ID number at the top left in Fig. 2 and paragraph 21, lines 1-6) for each patient , a list of application programs (paragraph 21, lines 11-12), and any separate identifying code (paragraph 21, lines 12-13) used for the patient by any of the application programs wherein the identifying codes are application specific patient identifying codes for the patient so that the

identifying code used by an application for a patient can be found by accessing the reference table. Here, the clinical exchange server is also programmed to facilitate information exchange between the applications by using the reference table to extract information from one application that is requested by another application (paragraph 26, lines 5-17).

Claim 19 is drawn to a system for distributed computing that includes a computer network (see Fig. 1 and first sentence in paragraph 18)) and first and second applications run on the network that use first and second different patient identification numbers for a first patient (see paragraph 21, lines 11-15), and a clinical exchange server (see paragraph 14, lines 13-14) where the exchange server is programmed to do three things. First, the exchange server is programmed to maintain a patient identification cross reference table that includes a list of applications and patient identification numbers used by each application where the patient identification numbers are application distinct (paragraph 21, lines 9-13). Second, the exchange server is programmed to maintain a list of events reported to it by the applications (paragraph 14, lines 16-18 and lines 24-29; paragraph 22, lines 6-10)). Third, the server is programmed to respond to queries from a first application about an event recorded by a second application by transmitting a query to the second application based on the information in the reference table and the list of reported events (paragraph 26, lines 10-15).

Claim 20 is drawn to a system for distributed computing comprising a computer network (see Fig. 1) and first and second applications (see applications in list in Fig. 2) run on the network that uses first and second different patient identification numbers (see identification numbers associated with the application list in Fig. 2) to reference a first patient, respectively and a clinical exchange server (see exchange server in Fig. 1 and paragraph 145, lines 13-16) programmed to perform two functions. First, the exchange server is programmed to maintain a patient identification cross reference table (see table in Fig. 2 and paragraph 21, line 9) including a list of applications

(paragraph 21, lines 11-13) on the network including the first and second applications and patient identification numbers (paragraph 14, lines 12-13) used by each application. Second, the exchange server is programmed to respond to inquiries from the first application about an event recorded by the second application by transmitting a query to the second application based on the information in the reference table (paragraph 26, lines 5-15). Thus, claim 20 is similar to claim 1 except that claim 20 does not require that the server maintain a list of events reported by applications and does not use the list of events to generate the query to the second application.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

In the final Office Action dated April 24, 2009, claims 1-8 and 14-20 were rejected under 35 USC § 103(a) as being unpatentable over Morange (US patent application No. 2005/0102374) in view of Felsher (US patent application No. 2002/0010679) and further in view of Smithies (US patent No. 5,544,255).

VII. ARGUMENT

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. MPEP § 2142. A prima facie case of obviousness under 35 U.S.C. § 103 requires, at a minimum, that the Examiner provide a clear articulation as to why the claimed invention would have been obvious to one of ordinary skill in the art. MPEP § 2142. Rejections on obviousness cannot be sustained by mere conclusory statements. Instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. MPEP § 2142.01 IV.

Claims 1-4 were rejected under 35 USC § 103(a) as being unpatentable over Morange (US patent application No. 2005/0102374) in view of Felsher (US patent application No. 2002/0010679) and further in view of Smithies (US patent No. 5,544,255).

First, with respect to claim 1, claim 1 requires, among other things, a cross reference table that includes a list of applications on a network and distinct patient identification numbers for each of at least two of the applications on the list and using information from the reference table to generate a second query to a second application.

Neither Morange nor Felsher teach or suggest applications that use different patient identifiers for the same patient as correctly recognized in the most recent Office Action.

However, despite contrary assertions in the Office Action, neither Morange nor Felsher teach or suggest several other steps required by claim 1. First, neither Felsher nor Morange teaches a reference table that stores a list of applications and identification numbers used by the applications. The sections of Felsher cited as teaching this limitation simply do not. More specifically, paragraph 266 teaches that transactions (i.e., data in a record that is related to a medical event such as a blood test, radiological data, an admission record, etc. – see paragraph 267)) for a single patient are all indexed using a single unique patient identifier (e.g., an SS number), paragraph 267 teaches that metadata associated with and rules for accessing transaction records are stored outside the records to facilitate access thereto, paragraph 268 teaches that records may comprise a subset of files that are distributed and indexed and none of the cited paragraphs teaches or suggests a table listing applications and associated patient identifiers and paragraph 279 teaches that one system architecture includes databases of records, an index relating patient IDs to database records and a certification authority.

Second, while Felsher may contemplate a system that includes multiple applications, Felsher clearly does not teach or suggest that a second query is generated for a second application in response to reception of a first query at an exchange server. To this end, Felsher teaches a system that includes a custodian medical record system that renders records related to medical transactions (see paragraph 264) available to different applications. To this end, as records are created, the records are stored. Records may be stored with the custodian medical record system or, in the alternative, in other locations as part of a distributed database (see paragraph 268). Where records

are stored in a distributed database, Felsher teaches that a central index is maintained by the custodian medical record system which records, for each patient, the location of the record (i.e., the transaction) along with access rules (e.g., metadata and access rules – see paragraphs 267 and 268).

Where a second application creates and stores a record and the location of that record is indexed by the custodian system, when the stored record is subsequently required by a first application, a single query is provided to the custodian system (see paragraph 264) and the custodian system can use the index to directly access the record in the database. Thus, because Felsher contemplates a system wherein the custodian system can directly access a required record, there is no reason for the custodian system to generate a second query to be provided to the second application. In short, Felsher simply teaches a distributed database where a custodian system indexes records for patients so that applications that generate the records do not have to be employed after record storage to access the records.

Third, even if it were determined that Felsher teaches a system where a server generates a second query to a second application, the second query taught in Felsher is the same as the first query and therefore there is no teaching or suggestion that a second query that is transmitted is based on information from a reference table or on a list of reported events.

Turning to paragraph 264 in Felsher which was cited in the Office Action as teaching that a second query is generated, that paragraph only teaches that a single query is transmitted from a recipient (i.e., from the application that generates the query) to the custodian medical records system (see lines 6-9). Here, there is no second query, only a first. As explained above, to the extent that the custodian medical record system has to access required data through an index to another database or a specific storage location, that indexed access is not a second query and instead is simply use of a direct pointer to the location where the required data is stored.

Thus, Morange and Felsher fail to teach or suggest several claim 1 limitations.

Turning to Smithies, Smithies fails to teach or suggest what the other references lack. First, while Smithies appears to contemplate a system including a database 12 (see Fig. 1) that stores a list of different patient identifiers for a specific patient, Smithies

fails to teach or suggest a reference table like the one in claim 1 that includes both a list of applications and associated patient identifiers. In this regard, Smithies teaches a system wherein a signature verification service is provided to multiple applications via a network (see abstract and Fig. 1 generally). To accomplish this task, Smithies teaches that database 12 is provided where model information indicative of a user's signature is stored. When an application employs the verification service a first time, the application transmits a message to the service indicating that the service is required where the message includes (1) information that can be used to uniquely identify a person whose signature is to be authenticated (see col. 8, lines 50 and 53) and (2) a signature of the person to be authenticated (or information derived from the signature for comparison to the model signature information). Once the system identifies the identity of the person, the person's stored signature information is retrieved and compared to the signature information received from the application. Where the signature information matches within a threshold, the signature is authenticated.

In addition, once a match occurs between signature information, the application generates an application unique patient identifier (AUID) (see col. 18, lines 42-44) and provides that unique identifier to the database 12 during a registration process. The unique patient identifier forms the basis for a new record for the person and is associated with the signature and is cross linked with other records for the person that were generated by other applications (see col. 18, lines 52-56). Thereafter, when the application wants to subsequently authenticate the same person's signature, the application need only transmit the AUID to the database which can then be used by the database to retrieve the signature information for the person (see col. 18, lines 49-51).

In the above description, while the database may in fact store a list of person IDs used by different applications to reference a single person, there is absolutely no reason why such a database also has to include a list of applications associated with the person IDs. Consistent with this understanding Applicant has examined Smithies in detail and there is no teaching that a list of applications is stored along with the person identifiers.

Second, like Morange and Felsher, Smithies fails to teach or suggest responding to an inquiry from a first application by transmitting a query to a second application based on information in the reference table (i.e., based on the application list and

associated or corresponding patient identifiers in the table). In fact, because Smithies only teaches that a list of patient IDs are stored and not a list of associated applications, Smithies cannot teach a way to generate a second query to a second application based on information in the reference table. In short, because Smithies fails to teach or suggest an application list, there is no way for Smithies to determine which patient ID numbers are associated with which applications if a second query were to be generated.

For at least these reasons Applicant believes claim 1 and claims that depend there from are non-obvious over the cited references and requests that the current rejection be overturned.

Claims 5-8 and 14-20 were rejected under 35 USC § 103(a) as being unpatentable over Morange (US patent application No. 2005/0102374) in view of Felsher (US patent application No. 2002/0010679) and further in view of Smithies (US patent No. 5,544,255).

Each of claims 5, 14, 18, 19 and 20 requires limitations similar to the limitations described above with respect to claim 1 and each is believed to be non-obvious for essentially the same reasons described above with respect to claim 1.

For at least the above reasons Applicant believes each of claims 1, 5, 14, 18, 19 and 20 recites patentable subject matter and respectfully requests that the current rejections be overturned.

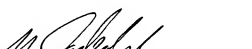
CONCLUSION

In view of the above, Appellant requests reversal of the final rejection regarding claims 1-8 and 14-20 and a Notice of Allowance.

Respectfully submitted,

CARL DVORAK

Dated: August 31, 2009

By: 

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VIII. CLAIMS APPENDIX

(Patent Application No. 10/052,659)

1. In a system for distributed computing in a health care environment in which multiple different applications are in use connected on a common computer network, the improvement comprising

a clinical exchange server on the network, the clinical exchange server including memory, the clinical exchange server programmed (i) to maintain a patient identification cross reference table, the patient identification cross reference table including a list of applications on the network and patient identification numbers used by each application wherein the patient identification numbers used by the applications are application distinct patient identification numbers for the patient, wherein the application distinct patient identification numbers for the patient include a first patient identification number used by a first application and a second patient identification number used by a second application where the second patient identification number is different than the first patient identification number, (ii) to maintain a list of events reported to it by other applications on the network and (iii) to respond to inquiries from a first application about an event recorded by a second application by transmitting a query to the second application based on the information in the reference table and the list of reported events.

2. The system as claimed in claim 1 wherein the clinical exchange server also maintains an abstract about the events sent to it to facilitate exchange of information between the applications.

3. The system as claimed in claim 1 wherein the reference table includes a master patient index identification code assigned to the patient as well as an application specific identification number assigned to the patient by each application.

4. The system as claimed in claim 1 wherein the clinical exchange server also stores health insurance information about each patient so that such health insurance information can easily be accessed by any of the applications.

5. A computer network for operation by a healthcare delivery enterprise, the network including a plurality of servers operating a plurality of application programs, the network comprising

a clinical exchange server including a storage device, the clinical exchange server programmed to store in the storage device a reference table, the reference table including a master patient identifier for each patient, a list of application programs, and any separate identifying code used for the patient by any of the application programs wherein the identifying codes are application specific patient identifying codes for the patient, wherein the application specific patient identifying codes for the patient include a first patient identifying code used by a first application and a second patient identifying code used by a second application where the second patient identifying code is different than the first patient identifying code, so that the identifying code used by an application for a patient can be found by accessing the reference table, the clinical exchange server further programmed to facilitate information exchange between the applications by using the reference table to extract information from an application requested by another application.

6. The computer network of claim 5 wherein the clinical exchange server also maintains a table of events associated with patients, the table of events including identifying information about the events and the identification of the application holding information about the event.

7. The computer network of claim 6 wherein the event table also includes an abstract about each of the events.

8. The computer network of claim 5 wherein the clinical exchange server also maintain health insurance information about the patient that can be access by another application.

9-13. (Cancelled).

14. A method for use with a system for distributed computing in a health care environment in which multiple different applications are in use connected on a common computer network, the method comprising the steps of:

providing a clinical exchange server on the network, the clinical exchange server including memory in which a reference table and a list of events are maintained where the reference table includes a list of applications on the network and patient identification numbers used by each application wherein the patient identification numbers used by the applications are application distinct patient identification numbers for the patient, wherein the application distinct patient identification numbers for the patient include a first patient identification number used by a first application and a second patient identification number used by a second application where the second patient identification number is different than the first patient identification number, the list of events including a list of events reported to the clinical exchange server by other applications on the network;

when an inquiry is received from a first application about an event recorded by a second application, the clinical exchange server transmitting a query to the second application based on the information in the reference table and the list of reported events.

15. The method of claim 14 wherein the step of providing a clinical exchange server includes providing a clinical exchange server that also maintains an abstract

about each event sent to the clinical exchange server to facilitate exchange of information between the applications.

16. The method of claim 14 wherein the reference table includes a master patient index identification code assigned to the patient as well as an application specific identification number assigned to the patient by each application.

17. The method of claim 14 wherein the step of providing a clinical exchange server includes providing a clinical exchange server that also stores health insurance information about each patient so that such health insurance information can easily be accessed by any of the applications.

18. A method for use with a computer network for operation by a healthcare delivery enterprise, the network including a plurality of servers operating a plurality of application programs, the method comprising the steps of:

providing a clinical exchange server including a storage device, the clinical exchange server programmed to store in the storage device a reference table, the reference including a master patient identifier for each patient, a list of application programs, and any separate identifying code used for the patient by any of the application programs wherein the identifying codes are application specific identifying codes for the patient, wherein the application specific patient identifying codes for the patient include a first patient identifying code used by a first application and a second patient identifying code used by a second application where the second patient identifying code is different than the first patient identifying code, so that the identifying code used by an application for a patient can be found by accessing the reference table;

programming the clinical exchange server to facilitate information exchange between the applications by using the reference table to extract information from an application requested by another application.

19. A system for distributed computing in a health care environment, the system comprising: a computer network;

a first application run on the network that uses a first patient identification number to reference a first patient;

a second application run on the network that uses a second patient identification number to reference the first patient where the second patient identification number is different than the first patient identification number;

a clinical exchange server on the network, the clinical exchange server including memory, the clinical exchange server programmed (i) to maintain a patient identification cross reference table, the patient identification cross reference table including a list of applications on the network including the first and second applications and patient identification numbers used by each application including the first and second patient identification numbers for the first patient, (ii) to maintain a list of events reported to it by other applications on the network and (iii) to respond to inquiries from the first application about an event recorded by the second application by transmitting a query to the second application based on the information in the reference table and the list of reported events.

20. A system for distributed computing in a health care environment, the system comprising:

a computer network;

a first application run on the network that uses a first patient identification number to reference a first patient;

a second application run on the network that uses a second patient identification number to reference the first patient where the second patient identification number is different than the first patient identification number;

a clinical exchange server on the network, the clinical exchange server including memory, the clinical exchange server programmed (i) to maintain a patient identification cross reference table, the patient identification cross reference table including a list of applications on the network including the first and second applications and patient identification numbers used by each application including the first and second patient identification numbers for the first patient and (ii) to respond to inquiries from the first application about an event recorded by the second application by transmitting a query to the second application based on the information in the reference table.

IX. EVIDENCE APPENDIX

There is no evidence, other than the documents cited in the final Office Action.

X. RELATED PROCEEDINGS APPENDIX

There are no decisions in related proceedings.